

Additional File 1: Mass Spectrometry Data For Pyk2 Complexes in RSMC

For each Pyk2 associated protein, spectral hits are shown for each unique peptide over the timecourse of stimulation. Total spectral hits per peptide are shown to the right of the timecourse for each condition. Total peptides and spectral hits for each timepoint are shown below the list of peptides for each protein

Description	PeptideSequence	Condition	Pyk2						Pyk2 Total	Pyk2&US28						Pyk2&US28 Total Min post-stimulation
			0	5	10	15	30	60		0	5	10	15	30	60	
MYH9 Isoform 1 of Myosin-9	K.AKQTLNER.G											1	1			2
	K.AKQTLNERGELANEVK.V									1	1	3				5
	K.ALELDSNLYR.I									1	1					3
	K.ANLQIDQINTDLNLER.S		1		1		2	1	5	2	2	3	1	1	2	11
	K.DDVGKSVHELEK.S									1	1					2
	K.DFSALESQLODTQELLQFEENR.Q		4		2	1	2	1	10	2	6	7	6	5	6	32
	K.DFSALESQLODTQELLQFEENRQK.L		2			2	2		6	2	2	2				8
	K.DFSALESQLODTQELLQFEENRQKLSLSTK.L				3	2			5	2						4
	K.DLEGLSQR.H											4				4
	K.FDQLLAEEK.T							1	1	1	1	1		1	1	5
	K.FDQLLAEEKTISAK.Y															1
	K.GMFRTVGQLYKEQLAKLMATLRNTNPNFVR.C											1				1
	K.HEAMITDLEER.L											2		1		3
	K.HSQAVEELAEQLEQTKR.V		1					1	2	2	2	3	1		2	10
	K.IAQLEEQLDNETK.E				1				1			3	2	1		6
	K.IAQLEEQLDNETKER.Q									1	1	2			1	5
	K.KANLQIDQINTDLNLER.S		1				1		2	2	2	1		2	1	8
	K.KDQGLERQLLQANPILEAFGNAK.T															1
	K.KEEELQAALAR.V														1	1
	K.KFDQLLAEEK.T							2	2	2		1	1	1	1	6
	K.KFDQLLAEEKTISAK.Y		2			2	2	1	7	3					2	5
	K.KKMQQNIQELEEQLLEEEESAR.Q											1				1
	K.KMQQNIQELEEQLLEEEESAR.Q											1	1			2
	K.KQKQFDQLLAEEKTISAK.Y							1	1						2	2
	K.KRHEMPHYAITDTAYR.S		2			2	2	1	7	2	1	3			2	8
	K.KVEAQLQELQVK.F		1						1	1	1	2	2	1	1	8
	K.LDPHLVLDQLR.C											1	1			2
	K.LKNKHEAMITDLEER.L		1		1				2		4	4	2		2	12
	K.LKSMEEAMIQLEELAAER.A											1	1			2
	K.LQEMEGTVKSK.Y														1	1
	K.LQKLEGLSQR.H											1	2	1	1	5
	K.LQLEKVTTEAK.L							1	1							
	K.LRLEVNLAQAMK.A												1			1
	K.LTKDFSALESQLODTQELLQFEENR.Q		2			1	1	2	6	2	2	4	2		2	12
	K.LTKDFSALESQLODTQELLQFEENRQK.L		2			2	2	1	7	2	2	2			2	8
	K.LTKDFSALESQLODTQELLQFEENRQKLSLSTK.L						2		2	1					2	3
	K.MQQNIQELEEQLLEEEESAR.Q		2		2			1	5		4	4	1	2	2	13
	K.MQQNIQELEEQLLEEEESARQKLEK.V														3	3
	K.NFINNLAQADWAQK				2				2		1	1	1	1	1	5
	K.NKHEAMITDLEER.L									3	4	2	1	3		13
	K.NMDPLNDNIATLLHQSSDKFVSELWK.D											2				2
	K.NMDPLNDNIATLLHQSSDKFVSELWKDVDR.I											2				6
	K.QKQFDQLLAEEKTISAK.Y		1			1			2							3
	K.QKRDLEGEELALKTELEDTLDTAAQQLR.S					1			1						3	3
	K.QTLNERGELANEVK.V											2	2	2		6
	K.RALEQQVEEMKTQLEEELEDELQATEDAK.L											2				2
	K.RDLGEELALKTELEDTLDTAAQQLR.S											1	2			3
	K.RHEMPHYAITDTAYR.S											1			1	2
	K.RQAQERDELADEIANSSGK.G											1	1			2
	K.RQLEEAEEEAQR.A											2	3	2	2	9
	K.RQLEEAEEEAQRANASR.R											1				1
	K.SKKDQGLER.Q											1				1
	K.SKKDQGLERQLLQANPILEAFGNAK.T					2	2		4						2	2
	K.SMAEAMIQLEELAAER.A		2					1	3	2	4	5	2	4	4	21
	K.SSKLTKDFSALESQLODTQELLQFEENR.Q														1	1
	K.SSKLTKDFSALESQLODTQELLQFEENRQK.L					1	2		3						1	1
	K.SVHELEKSKR.A									1					1	2
	K.TDILLPEPYNK.Y											1	1	1	1	4
	K.THEAQIQEMR.Q														2	2
	K.TQLEEELEDELQATEDAK.L											1	3			7
	K.TQLEEELEDELQATEDAKLR.L											1	3		3	4
	K.VAAYDKLEK.T											1				1
	K.VEAQQLQELQVK.F		1					1	2	1	1	1	1	1	1	6
	K.VKVNKDDIQK.M							3	3	2	1				1	5
	K.VSHLLGINVDTDFTR.G		1		2	1	1	1	6	2	2	3	2	1	2	12
	K.YLYVDKNFINNLAQADWAQK				1				1			2	2	1	2	8
	R.ALEEAQEK.A											4				4
	R.ALEEAQEKAELEER.L		1						1	1	1	2			1	5
	R.ALEEAQEKAELEERLNK.Q									1					2	3
	R.ALEEAQEKAELEERLNKQFR.T														1	1
	R.ALEQQVEEMK.T											1	1	1	1	4
	R.ALEQQVEEMKTQLEEELEDELQATEDAK.L		2		1				3		3	8	3	2	2	18
	R.ALEQQVEEMKTQLEEELEDELQATEDAKLR.L									1	2	3				6
	R.ALEQQVEEMKTQLEEELEDELQATEDAKLRLEVNLAQAMK.A											2	3			5
	R.ASREILAQAKENEK.K		1						1		1	2	1		1	5
	R.ASREILAQAKENEK.L										1	1				2
	R.ASREILAQAKENEK.LK.S														1	1
	R.DELADEIANSSGK.G												1		2	3
	R.DLGEELALKTELEDTLDTAAQQLR.S											1				1
	R.DLGEELALKTELEDTLDTAAQQLR.S		5		3	4	2	3	17	4	8	7	4	5	6	34
	R.DLGEELALKTELEDTLDTAAQQLRSK.R									1					1	2
	R.DLGEELALKTELEDTLDTAAQQLRSKR.E									1					2	3
	R.DLQGRDEQSEK.K											1	1			2
	R.DLQGRDEQSEKKK.Q											1				1
	R.EEILAQAKENEK.K											1				1
	R.ELEDATETADAMNR.E		1		1			1	3	1	3	4		3	3	14
	R.ELEDATETADAMNREVSSLNKLR.R					2	1		3							
	R.EMEALEDER.K											1	1	1	1	4
	R.EMEALEDERK.Q									1	1	1	1	1		5
	R.EVSSLNKLR.R															1
	R.FLSNGHVITPGQDKDMFQETMEAMR.I					1			1		2	3			2	7
	R.HEMPHYAITDTAYR.S											2	2		1	5
	R.IAQLEEEEEEQGNTELINDR.L		2					2	4	2	3	4	2	2	2	15
	R.IAQLEEEEEEQGNTELDRLK.K		2			1		2	5	2					2	4
	R.IAQLEEEEEEQGNTELDRLKK.A									2					1	3
	R.IIGLDQVAGMSETALPGAFK.T											3	5	3	2	4
	R.IKVGRDYVQK.A														2	2
	R.INFDVNGYVGANIETYLLEK.S											4	4			8
	R.KKVEAQLQELQVK.F							1	1	2	2	4	2	2	4	16
	R.KLQRELEDAETADAMNR.E									1						1
	R.LEVNLAQAMK.A											2	1		1	5
	R.LQQLDILLVLDLHQR.Q		1			2		2	5	2	3	3	2	2	2	14

Additional File 1: Mass Spectrometry Data For Pyk2 Complexes in RSMC

Description	Peptide Sequence	Condition	Pyk2						Pyk2 Total	Pyk2&US28						Pyk2&US28 Total Min post-stimulation
			0	5	10	15	30	60		0	5	10	15	30	60	
MYH9 Isoform 1 of Myosin-9 Totals Unique Peptides 121	R.NTDQASMPDNTAAQK.V		2					1	4	1	1	2	1	2	1	8
	R.NTDQASMPDNTAAQKVSHELLGINVDFTR.G		2	1					7	3						5
	R.QAQQRDELADEIANSSGK.G				2	2		1			2	2	1			5
	R.QAQQRDELADEIANSSGKGALALEEK.R														1	1
	R.QAQQRDELADEIANSSGKGALALEEK.R														1	1
	R.QKHSQAVEELAEQLEQTK.R											1				1
	R.QKHSQAVEELAEQLEQTKR.V											1				2
	R.QLEEAEEEAQR.A															1
	R.SMMQDREDQSILCTGESGAGTKENTKK.V	1		1					2	1	2	3	1	1	1	9
	R.TEMEDLMSSK.D															2
	R.TEMEDLMSSKDDVGK.S										1	1	1	1	1	5
	R.TEMEDLMSSKDDVGKSVHELEK.S										1	3	1		1	6
	R.TFHIFYLLSGAGEHLK.T									1						1
	R.TFHIFYLLSGAGEHLKTDLLLEPYNKYR.F											2				2
	R.TVGQLYKEQLAK.L											3				3
	R.TVGQLYKEQLAKLMATLRNTNPNFVR.C					1		2	3		1		1		3	6
	R.VISGVLQLGNIVFK.K											2				2
	R.VISGVLQLGNIVFKK.E					1	1		2	1	2	2	2		1	8
	R.VVFQEFR.Q											2				2
MYH9 Isoform 1 of Myosin-9 Totals Unique Peptides 121			46	18	32	31	35		162	66	119	196	64	61	125	631
MYH10 Isoform 1 of Myosin-10 Unique Peptides 47	K.AMVNKKDDIOK.M										1	1				2
	K.IGQLEEQLEQEAQ.E											1				1
	K.KEEELQGALAR.G											1		2		3
	K.KLDAQVQELHAK.V									1	1	1				3
	K.KLVWIPSER.H									1	1	1			1	4
	K.KQLEELHDLER.V										2	1				3
	K.LKSLAEAILQLQEELASSER.A											1				1
	K.LQNELDNVSTLLEAAEK.K											3		1		4
	K.LQNELDNVSTLLEAAEK.G											2				2
	K.LVQEQGSHSK.F												1			1
	K.MQAHQDLEEQDDEEGAR.Q										1	3				4
	K.NILAEQLQAETLFAEAEMR.A										2	4	1	1		8
	K.QVLALQSLADTK.K										1	1	1	1	1	5
	K.RQLEEAEEEAATR.A											1				1
	K.SALLDEKR.R									1						1
	K.SLEAAILQLQEELASSER.A	1							1		4	3	1	4	4	16
	K.VIQYLAHVASSHK.G				1				1		1	2			1	4
	R.AAANKLVR.R											1				1
	R.ADMEDLMSSKDDVGKNVHELEK.S											2				2
	R.ALEEALEAKEEFER.Q										1	1				2
	R.ALEQQVEEMR.T										1	1	1	1		4
	R.AVIYNPATQADWTAK.K									1	1	1		2	1	6
	R.DLQTRDEQNEEK.K										1					1
	R.DLSEELALKTELEDLDTTAAQQLR.T	1							1	3	2	4	1	3	2	15
	R.ELDDATEANGLSR.E	1						1	2	1	1	1	1	1	1	6
	R.ELEAELEDER.K											1				1
	R.ELEAELEDERK.Q											2				2
	R.ELQAQIAELQEDFESEK.A										3	2	2	1		8
	R.GDDETLHK.N										1					1
	R.GDDETLHKNNALK.V										1					1
	R.GGPISFSSSR.S										1	1		1	1	4
	R.HADQYKQMEK.A										1					1
	R.HATALEELSEQLEQAK.R										1					1
	R.HATALEELSEQLEQAKR.F										1					1
	R.HGFEAASKEER.G								1	2	1	2			1	6
	R.IAQLEEELEEQSNMELLNDR.F										1	2		1		4
	R.IAQLEEELEEQSNMELLNDRFR.K															1
	R.KKLDAAQVQELHAK.V											2			1	2
	R.LEVNMQAMK.A											1				1
	R.LQQLDDLTVDLHQR.Q											1				1
	R.NKQEVMSIDLEER.L											1				1
	R.NTDQASMPDNTVAQK.L											1				1
	R.QLEEAEEEAATR.A									1	1	1	1	1		5
	R.QLLQANPILESFQNAK.T										1	2			2	5
	R.RGGPISFSSSR.S	1							1	1		1		1	1	4
	R.TGLEDPERYLFVDR.A															1
	Y.LAHVASSHK.G											1				1
MYH10 Isoform 1 of Myosin-10 Totals Unique Peptides 47			4		1		2		7	12	28	63	10	21	19	153
ACTB Actin, cytoplasmic 1 Unique Peptides 15	A.PEEHPVLLTEAPLNPK.A				1				1							1
	E.TFNTPAMYVAIQAVLSLYASGR.T		1						1		1	2		1	4	8
	K.DLYANTVLSGGTMYPGIADR.M		3		1	3			7	2	4	5		2	3	16
	K.LCYVALDFEQEMATAASSSSLEK.S					2			2						5	5
	K.MTQIMFETFTNPAMYVAIQAVLSLYASGR.T										2	3				5
	K.QEYDESGPSIVHR.K											1		1	1	3
	K.YSVWIGGSILASLSTFQQMWISQYDESGPSIVHRK.C											1				1
	R.DIKEKLCYVALDFEQEMATAASSSSLEK.S				3				3							2
	R.EIVRDIKELCYVALDFEQEMATAASSSSLEK.S				2				2							2
	R.FRCPEALFQPSFLGMESCGIHETTFNSIMK.C															2
	R.GYSFTTTAER.E	1		1			1	1	4	1	2	2	1	1	1	8
	R.KDLYANTVLSGGTMYPGIADR.M											1				1
	R.TTGIVMDSGDGVTHTVPIYEGALPHAILR.L	3		1	3	2		2	11	2	3	4	1		1	11
	R.VAPEEHPVLLTEAPLNPK.A	2		2	3	2	1	5	15	3	2	2	3	2	2	14
	R.VAPEEHPVLLTEAPLNPKANR.E									1					1	2
ACTB Actin, cytoplasmic 1 Totals Unique Peptides 15			10	5	17	5	1	8	46	9	15	21	5	7	25	82
MYL6B;MYL6 Isoform Non-muscle of Myosin light polypeptide 6 Unique Peptides 8	K.DQGTGYDYVEGLR.V									1	1	1		1	1	5
	K.NKDQGTGYDYVEGLR.V		1		2	1			4	4	4	5	3	3	4	23
	K.NKDQGTGYDYVEGLRVFDKEGNGTVMGAER.H									1						2
	K.VLDFEHLPLMLQTVAK.N	2		1	5	1			9	4	6	8	3	3	4	28
	K.VLGNPKSDEMNVK.V				1	1			2	1						2
	K.VLGNPKSDEMNVKVLDFEHLPLMLQTVAK.N					3			3	3						5
	R.ALGNQPTNAEVLKVLGNPKSDEMNVK.V				2	2			4	2					1	3
	R.TGDKILYSQCGDVMR.A					1			1						3	3
MYL6B;MYL6 Isoform Non-muscle of Myosin light polypeptide 6 Totals Unique Peptides 8			3	1	13	6			23	16	11	14	6	7	19	73
TPM1 tropomyosin 1 alpha chain isoform 2 Unique Peptides 3	K.AEADVASLNR.R											2	1		1	4
	K.EENLSMHQMLDQTLLELNNM.-											2				2
	K.HIAEADAR.K										1	1		1		3

Additional File 1: Mass Spectrometry Data For Pyk2 Complexes in RSMC

Description	Peptide Sequence	Condition	Pyk2						Pyk2 Total	Pyk2&US28						Pyk2&US28 Total Min post-stimulation
			0	5	10	15	30	60		0	5	10	15	30	60	
TPM1 tropomyosin 1 alpha chain isoform 2 Totals: Unknown Peptides 28	K.HIAEADARKYEEVAR.K									2						3
	K.LDKENALDRAEQAEADKKAAEDR.S										1	1				3
	K.LEEAEKAADESER.G				1				1	3	1	3	1	3		11
	K.LVIESDLER.A														1	1
	K.SIDDLLEK.V												1	1		3
	K.SIDDLLEKVAHAKEENLSMHQMLDQTLLELNNM.-									2						2
	K.VAHAKEENLSMHQMLDQTLLELNNM.-										1	3				4
	K.VLSDKLKEAETR.A												2			2
	R.AQKDEEKMEIQEIQK.E									1					1	2
	R.AQKDEEKMEIQEIQK.EAK.H									1					2	3
	R.GMKVIESR.A															1
	R.IQLVEEELDR.A		1		1				2							7
	R.IQLVEEELDRAQER.L									2	2	1	1	2	1	9
	R.IQLVEEELDRAQERLATALQKLEEA.EK.A															1
	R.IQLVEEELDRAQERLATALQKLEEA.EKAADESER.G															2
	R.KLVIESDLER.A									1		1	1	1	1	4
	R.KLVIESDLERAEEER.A										1					1
	R.KLVIESDLERAEEERAESEGG.C									1	1					3
	R.LATALQKLEEA.EK.A		1						1		2	1				5
	R.LATALQKLEEA.EKAADESER.G		1		2			2	5	2	2	1				9
	R.LATALQKLEEA.EKAADESERGMK.V									2						4
	R.RIQLVEEELDR.A				1				1		1	1	1	2	2	7
	R.RIQLVEEELDRAQER.L		2		2				4	1	2	1			2	6
TPM2 Isoform 3 of Tropomyosin beta chain Totals: Unknown Peptides 28			5	3	4			2	14	19	17	22	8	10	26	102
TPM2 Isoform 3 of Tropomyosin beta chain Totals: Unknown Peptides 7	K.EENVEIHQTLDTLLELNNL.-											3		1	2	6
	K.LEKTIDDLLEETLASAKEENVEIHQTLDTLLELNNL.-														1	1
	K.TIDDLLEETLASAK.E														2	3
	K.TIDDLLEETLASAKEENVEIHQTLDTLLELNNL.-		2		2	3		1	8	2	3	5	3	3	3	19
	R.ARQLEELR.T									2		2				4
	R.KLVILEGELERSEERA.EVAESR.A									1						1
	R.SEERA.EVAESR.A										1					1
ACTA1 Actin, alpha skeletal muscle Totals: Unknown Peptides 7			2	2	3			1	8	5	4	11	3	6	6	35
ACTA1 Actin, alpha skeletal muscle Totals: Unknown Peptides 4	K.DLYANNVMSGGTTMYPGIADR.M		1						1			1		3		4
	K.IWHTFYNELR.V		1		1	1			3	1	2	1	2	1	1	8
	K.YPIEHGITNWDDEMEKIWHHTFYNELR.V		2						2	6	2	3			3	14
	R.KDLYANNVMSGGTTMYPGIADR.M										1					1
VIM Vimentin Totals: Unknown Peptides 16			4	1	1				6	7	5	5	2	4	4	27
VIM Vimentin Totals: Unknown Peptides 16	D.FSLADAINTEFK.N											1				1
	K.FADLSEANR.N		1						1	1						2
	K.ILLAELEQLK.G											1				1
	K.ILLAELEQLKGQKG.S									1		2				3
	K.LQEEMLQR.E											1				1
	K.VELQELNDR.F											1				1
	R.DGQVINETSQHDDLE.-							2	2	1						1
	R.EKLQEEMLQR.E											1				1
	R.FLEQQNKILLAELEQLKGQKG.S					2			2	2						2
	R.ISLPLPNFSSNLNR.E											2				2
	R.KVESLQEEIAFLK.K											1				1
	R.LGDLYEEEMR.E											1				1
	R.LLQDSVDFSLADAINTEFK.N					1			1	1	1	2				4
	R.LLQDSVDFSLADAINTEFKNTR.T					2			2							2
	R.QDVDNASLAR.L										1	2				3
	R.TNEKVELQELNDRFANYIDKVR.F					2			2	2						2
TMOD3 Tropomodulin-3 Totals: Unknown Peptides 3			1		7			2	10	8	2	16				26
TMOD3 Tropomodulin-3 Totals: Unknown Peptides 3	K.MLEENTNLK.F											1				1
	K.QLETVLDDLPENALLPAGFR.Q									1	2	5	1	2		11
	R.AANAITKNNDLVR.K					1		1	2	1					2	3
TPM1 Isoform 1 of Tropomyosin alpha-1 chain Totals: Unknown Peptides 6					1			1	2	2	2	6	1	2	2	15
TPM1 Isoform 1 of Tropomyosin alpha-1 chain Totals: Unknown Peptides 6	K.GTEDELDKYSEALKDAQEKLEAEK.K													2		2
	K.LKGTDELDKYSEALKDAQEK.L													1		1
	K.LKGTDELDKYSEALKDAQEKLEAEK.K										1	2		1		4
	K.QLEDELVSLQK.K										1	1	1	2	1	6
	R.SKQLEDELVSLQK.K										1	2	1	1	1	6
	R.SKQLEDELVSLQKK.L														1	1
TPM4 Isoform 1 of Tropomyosin alpha-4 chain Totals: Unknown Peptides 6											3	5	2	7	3	20
TPM4 Isoform 1 of Tropomyosin alpha-4 chain Totals: Unknown Peptides 6	K.HIAEEADR.K										2			1		3
	K.HIAEEADRKYEEVAR.K									1	1				2	4
	K.LVILEGELER.A										1			1		2
	K.TIDDLLEEKLAQAK.E												1			1
	K.TIDDLLEEKLAQAKENVGLHQTLDTLNLNCL.-				2				2							3
	R.KLVILEGELER.A										1	2		1	1	5
GSN Isoform 1 of Gelsolin Totals: Unknown Peptides 6					2				2	1	5	2	1	3	6	18
GSN Isoform 1 of Gelsolin Totals: Unknown Peptides 6	K.DSQEEKEEALTSK.R										1	2		2		5
	K.QGFEPSPFVWGFLGWDDDYWSVDPLDR.A									1		1				2
	K.QTQVSVLPPEGGETPLFKQFFK.N				1				1							
	M.VVEHPFLK.A															
	R.QGQIYNWQGAQSTQDEVAASAILTAQLDEELGGTPVQSR.V		1						1		2	1			2	5
	R.YIETDPANR.D													1		1
GNB5 Isoform 1 of Guanine nucleotide-binding protein subunit beta-5 Totals: Unknown Peptides 1			1		1				2	1	3	4		3	2	13
GNB5 Isoform 1 of Guanine nucleotide-binding protein subunit beta-5 Totals: Unknown Peptides 1	I.IFGASSVDFSLSGRLLFAG.Y		1		1				2		2	2	2	2	1	9
			1		1				2		2	2	2	2	1	9
MYH11 Myosin-11 Totals: Unknown Peptides 1			2		1	1			4			1				1
MYH11 Myosin-11 Totals: Unknown Peptides 1	K.DDVGNVHLEK.S															
	R.DLGEELALKTELEDTLDTSTATQELR.A											2				2
	R.ELDEATESNEAMGR.E							1	1							
	R.INFDVTGYGVGAMETYLEK.S											1				1

Additional File 1: Mass Spectrometry Data For Pyk2 Complexes in RSMC

[illegible]